

Unit 4 Lesson 3B CW/HW - No Calculators!

I. Rewrite using the periodic properties. Evaluate, or even/odd

a. $\csc\left(\frac{9\pi}{4}\right)$

b. $-\tan\left(\frac{\pi}{4} + 15\pi\right)$

c. $\sin\left(-\frac{\pi}{4} - 1000\pi\right)$

d. $\cos\left(-\frac{\pi}{4} - 1000\pi\right)$

II. Let $\sin t = a$, $\cos t = b$, $\tan t = c$

Write each expression in terms of a, b, c .

a. $4\cos(-t) - \cos(t)$

b. $\sin(t + 2\pi) - \cos(t + 4\pi) + \tan(t + \pi)$

c. $\sin(-t - 2\pi) - \cos(-t - 4\pi) - \tan(-t - \pi)$

III. Simplify

a. $\frac{1}{\cot \frac{\pi}{4}} - \frac{2}{\csc \frac{\pi}{6}}$

b. $\cos \frac{\pi}{3} \sec \frac{\pi}{3} - \cot \frac{\pi}{3}$

c. $2\tan \frac{\pi}{3} + \cos \frac{\pi}{4} \tan \frac{\pi}{6}$